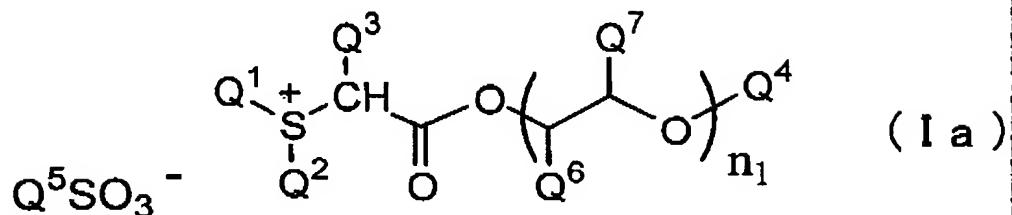
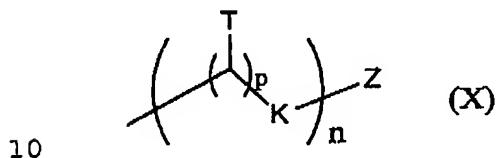


What is claimed is:

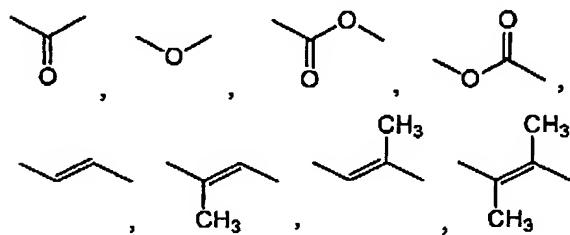
1. A sulfonium salt of the formula (Ia)



5 wherein Q^1 and Q^2 each independently represent alkyl having 1 to 6 carbon atoms or cycloalkyl having 3 to 10 carbon atoms, or Q^1 and Q^2 bond to form divalent acyclic hydrocarbon having 3 to 7 carbon atoms which form a ring together with the adjacent S^+ ; Q^3 , Q^6 and Q^7 each independently represent hydrogen or methyl; Q^4 represents a group of the formula (X)



wherein T represents hydrogen, alkyl having 1 to 10 carbon atoms or cycloalkyl having 3 to 10 carbon atoms, Z represents hydrogen, alkyl having 1 to 10 carbon atoms or cycloalkyl having 3 to 10 carbon atoms, K represents a divalent group selected from the group consisting of the following formulae



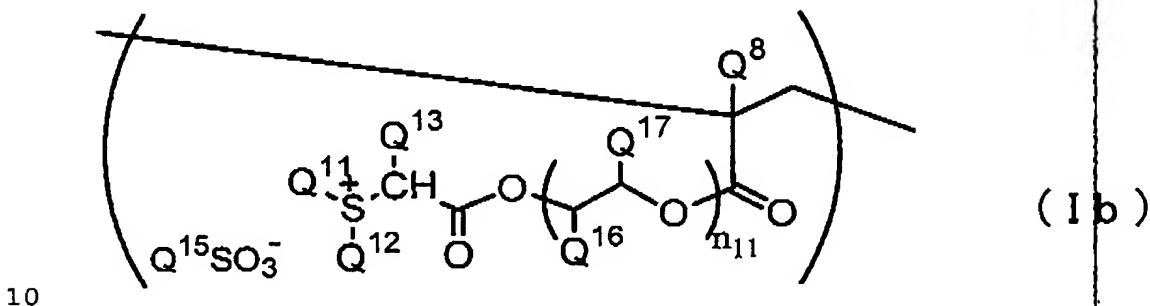
n denotes an integer of from 0 to 10, and p denotes an integer of from 0 to 3,

when n or p is 2 or more, each T may be the same or different and when n is 2 or more, each K may be the same or different;

n_1 denotes 0 or natural number; and Q^5 represents perfluoroalkyl having 1 to 8 carbon atoms, alkyl having 1 to 8 carbon atoms or aromatic group having 6 to 12 carbon atoms which may be substituted; or camphor group;
 5 with the proviso that when n_1 denotes 0, n denotes an integer of from 1 to 10, and when n_1 denotes 1 and n denotes 0, Z is not alkyl.

2. A polymeric compound comprising a structural unit of the formula

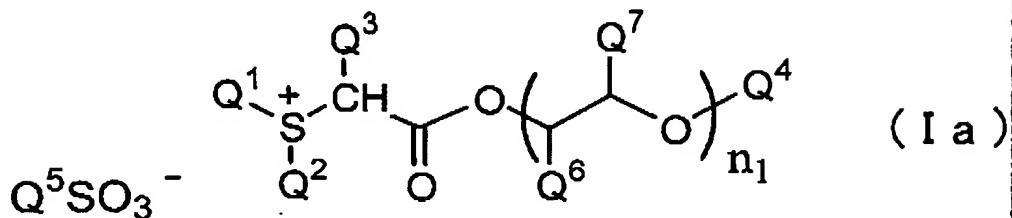
(Ib)



wherein Q^{11} and Q^{12} each independently represent alkyl having 1 to 6 carbon atoms or cycloalkyl having 3 to 10 carbon atoms, or Q^{11} and Q^{12} bond to form divalent acyclic hydrocarbon having 3 to 7 carbon atoms which form a ring together with the adjacent S^+ ; Q^8 , Q^{13} , Q^{16} and Q^{17} each independently represent 15 hydrogen or methyl; n_{11} denotes 0 or natural number; and Q^{15} represents perfluoroalkyl having 1 to 8 carbon atoms, alkyl having 1 to 8 carbon atoms or aromatic group having 6 to 12 carbon atoms which may be substituted, or camphor group.

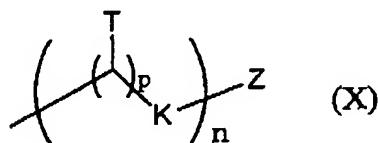
3. A chemical amplification type positive resist composition comprising
 20 (A) an acid generator comprising at least one compound selected from the group

consisting of a sulfonium salt of the formula (Ia)

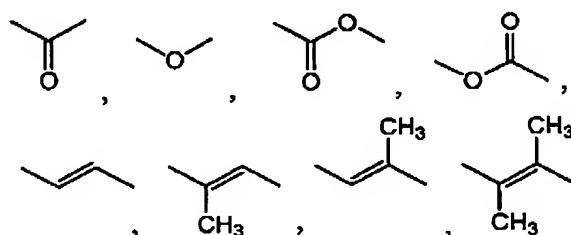


wherein Q^1 and Q^2 each independently represent alkyl having 1 to 6 carbon atoms or cycloalkyl having 3 to 10 carbon atoms, or Q^1 and Q^2 bond to form

5 divalent acyclic hydrocarbon having 3 to 7 carbon atoms which form a ring together with the adjacent S^+ , Q^3 , Q^6 and Q^7 each independently represent hydrogen or methyl, Q^4 represents a group of the formula (X)

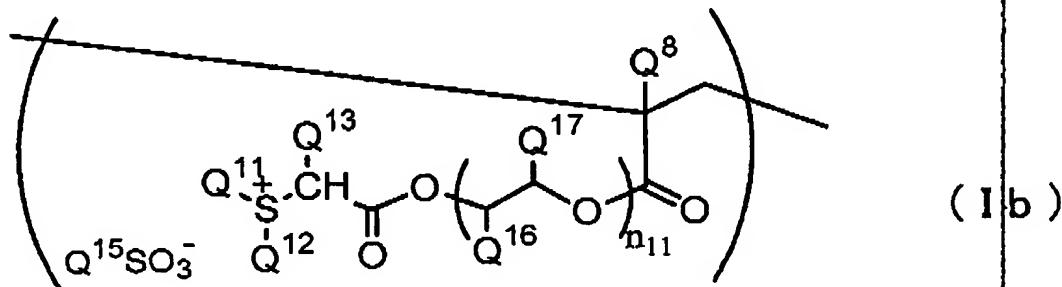


wherein T represents hydrogen, alkyl having 1 to 10 carbon atoms or
10 cycloalkyl having 3 to 10 carbon atoms, Z represents hydrogen, alkyl having 1
to 10 carbon atoms or cycloalkyl having 3 to 10 carbon atoms, K represents a
divalent group selected from the group consisting of the following formulae



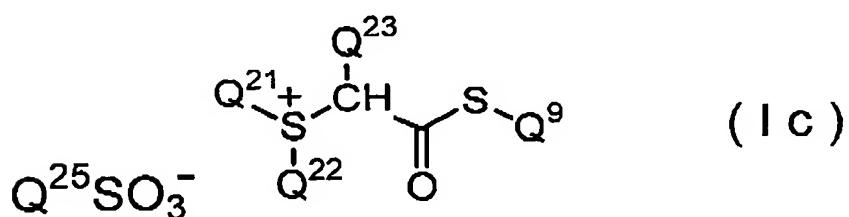
n denotes an integer of from 0 to 10, and p denotes an integer of from 0 to 3,
when n or p is 2 or more, each T may be the same or different and when n is 2
or more, each K may be the same or different,

n_1 denotes 0 or natural number, and Q^5 represents perfluoroalkyl having 1 to 8 carbon atoms, alkyl having 1 to 8 carbon atoms or aromatic group having 6 to 12 carbon atoms which may be substituted; or camphor group,
 with the proviso that when n_1 denotes 0, n denotes an integer of from 1 to 10, and
 5 when n_1 denotes 1 and n denotes 0, Z is not alkyl;
 a polymeric compound comprising a structural unit of the formula (Ib)



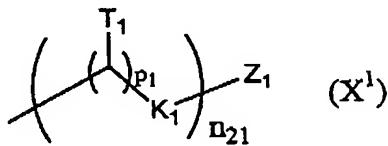
wherein Q^{11} and Q^{12} each independently represent alkyl having 1 to 6 carbon atoms or cycloalkyl having 3 to 10 carbon atoms, or Q^{11} and Q^{12} bond to form 10 divalent acyclic hydrocarbon having 3 to 7 carbon atoms which form a ring together with the adjacent S^+ , Q^8 , Q^{13} , Q^{16} and Q^{17} each independently represent hydrogen or methyl, n_{11} denotes 0 or natural number; Q^{15} represents perfluoroalkyl having 1 to 8 carbon atoms, alkyl having 1 to 8 carbon atoms or aromatic group having 6 to 12 carbon atoms which may be substituted, or 15 camphor group; and

a sulfonium salt of the formula (Ic)

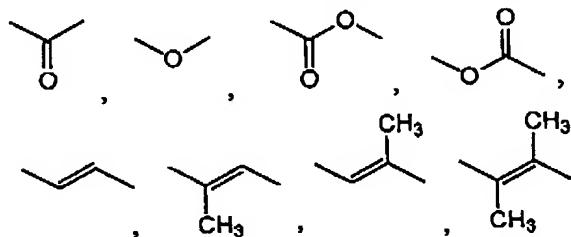


wherein Q^{21} and Q^{22} each independently represent alkyl having 1 to 6 carbon atoms or cycloalkyl having 3 to 10 carbon atoms, or Q^{21} and Q^{22} bond to form divalent acyclic hydrocarbon having 3 to 7 carbon atoms which form a ring together with the adjacent S^+ , Q^{23} represents hydrogen or methyl, Q^9 represents a

5 group of the formula (X^1)



wherein T_1 represents hydrogen, alkyl having 1 to 10 carbon atoms or cycloalkyl having 3 to 10 carbon atoms, Z_1 represents hydrogen, alkyl having 1 to 10 carbon atoms or cycloalkyl having 3 to 10 carbon atoms, K_1 represents 10 a divalent group selected from the group consisting of the following formulae

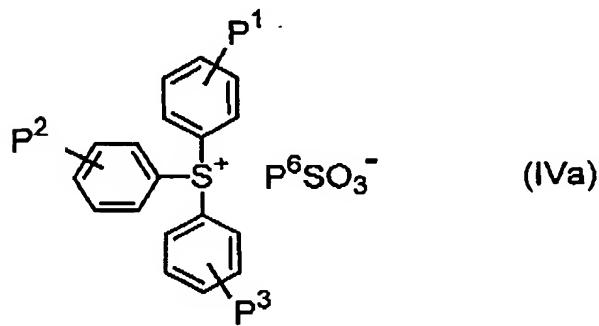


n_{21} denotes an integer of from 0 to 10, p_1 denotes an integer of from 0 to 3, when n_{21} or p_1 is 2 or more, each T_1 may be the same or different and when n_{21} is 2 or more, each K_1 may be the same or different,

15 Q^{25} represents perfluoroalkyl having 1 to 8 carbon atoms, alkyl having 1 to 8 carbon atoms or aromatic group having 6 to 12 carbon atoms which may be substituted, or camphor group, and
(B) resin which contains a structural unit having an acid labile group and which itself is insoluble or poorly soluble in an alkali aqueous solution but becomes

soluble in an alkali aqueous solution by the action of an acid.

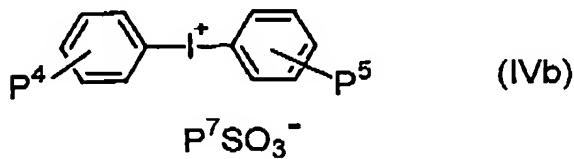
4. The composition according to Claim 3 wherein the acid generator further comprises at least one compound selected from the group consisting of triphenylsulfonium salt of the formula (IVa)



5

wherein P^1 , P^2 and P^3 each independently represent hydrogen, hydroxyl, alkyl having 1 to 6 carbon atoms or alkoxy having 1 to 6 carbon atoms; and P^6SO_3^- represents organic sulfonate ion, and

diphenyliodonium salt of the formula (IVb)

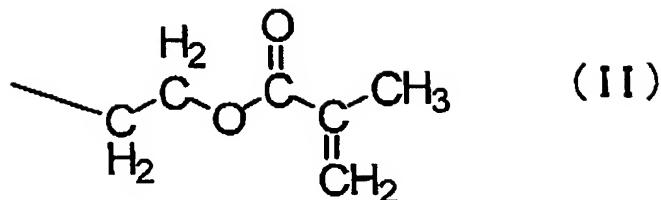


10

wherein P^4 and P^5 each independently represent hydrogen, hydroxyl, alkyl having 1 to 6 carbon atoms or alkoxy having 1 to 6 carbon atoms; and P^7SO_3^- represents organic sulfonate ion.

5. The composition according to Claim 3 wherein Q^4 and Q^9 is the ones having at least one ethylenically unsaturated bond.

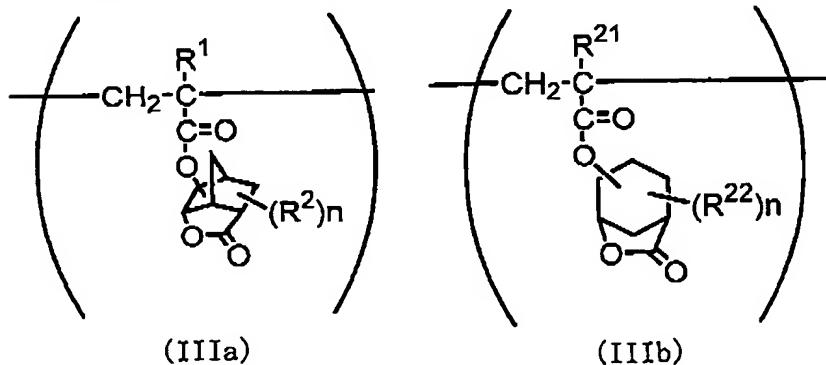
15 6. The composition according to Claim 3 wherein Q^9 is the one of the formula (II).



7. The composition according to Claim 3 wherein the content of the structural unit having an acid labile group is 10 to 80 % by mol in the resin.

8. The compound according to Claim 3 wherein the structural unit
5 having an acid labile group is the one derived from at least one monomer
selected from the group consisting of 2-alkyl-2-adamantyl (meth)acrylate, and
3-hydroxy-1-adamantyl (meth)acrylate.

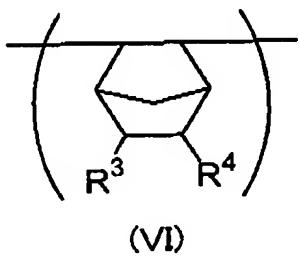
9. The composition according to Claim 3, wherein the resin further
contains, in addition to the structural unit having the acid-labile group, at least
10 one structural unit selected from the group consisting of a structural unit derived
from 3-hydroxy-1-adamantyl (meth)acrylate, a structural unit derived from
3,5-dihydroxy-1-adamantyl (meth)acrylate, a structural unit derived from
(meth)acryloyloxy- γ -butyrolactone having a lactone ring optionally substituted
by alkyl, a structural unit of the formula (IIIa) and a structural unit of the
15 following formula (IIIb)



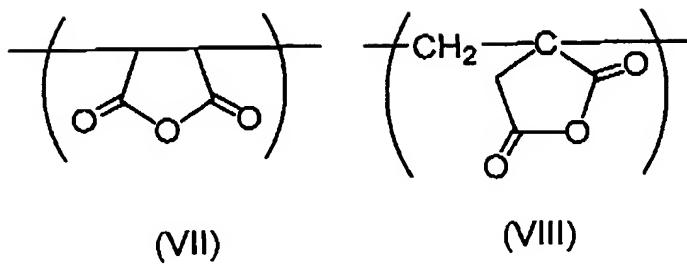
wherein R^1 and R^{21} each independently represent hydrogen, methyl or trifluoromethyl, and R^2 and R^{22} each independently represent methyl or trifluoromethyl, and n denotes an integer of from 1 to 3.

10. The composition according to Claim 3 wherein the resin further
5 contains a structural unit derived from 2-norbornene and a structural unit derived from an aliphatic unsaturated dicarboxylic anhydride.

11. The composition according to Claim 10 wherein the structural unit derived from 2-norbornene is a structural unit of the formula (VI)



10 wherein R^3 and R^4 each independently represent hydrogen, alkyl having 1 to 3 carbon atoms, hydroxyalkyl having 1 to 3 carbon atoms, carboxyl, cyano or -COOG group in which G represents alcohol residue, or R^3 and R^4 bond together to form a carboxylic anhydride residue represented by $-C(=O)OC(=O)-$; and
15 the structural unit derived from the aliphatic unsaturated dicarboxylic anhydride is at least one structural unit selected from the group consisting of the formulae (VII) and (VIII).



12. The composition according to Claim 3 which further comprises basic nitrogen-containing organic compound as a quencher.